



---

**west virginia** department of environmental protection

---

Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
Phone: (304) 926-0475 • Fax: (304) 926-0479

Joe Manchin III, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.wvdep.org](http://www.wvdep.org)

## **ENGINEERING EVALUATION / FACT SHEET**

### BACKGROUND INFORMATION

Application No.:	R13-2252A ( <b>After-The-Fact</b> )		
Plant ID No.:	047-00067		
Applicant:	Mid-Vol Coal Sales, Inc.		
Facility Name:	Eckman Loadout		
Location:	McDowell County		
SIC Code:	1221		
Application Type:	Modification		
Received Date:	November 23, 2009		
Engineer Assigned:	Dan Roberts		
<b>Re-assigned Date:</b>	<b>March 04, 2010</b>		
<b>Engineer Re-assigned:</b>	<b>Thornton E. Martin Jr.</b>		
Fee Amount:	\$2,000		
Date Received:	December 04, 2009		
Complete Date:	April 08, 2010		
Applicant Ad Date:	February 03, 2010		
Newspaper:	<i>The Industrial News</i>		
UTM's:	Easting: 459.02 km	Northing: 4139.41 km	Zone: 17
Description:	This after-the fact modification is to delete an existing railcar loadout, remove from service belt conveyor BC-5 and bin B6, expand an existing stockpile OS-1, reconfigure existing equipment and addition of new equipment to establish a coal processing operation and new railcar loadout. Changes are dated October 12, 2009 in section 14A of application.		

### DESCRIPTION OF PROCESS (taken from application)

Existing equipment and process permitted under R13-2252 consists of coal being trucked onto the site from the county road and dumped onto an open stockpile OS-1 at transfer point TP-1

(N) or into existing bins B4 and B5 at TP-15 (PE). Coal is transferred from the stockpile OS-1 by endloader to bins B4 and B5 at TP-15. From either of the bins, coal is transferred from the bins to belt conveyor BC-5 at TP-17 (PE) and TP-18 (PE). BC-5 then transfers the coal into bin B6 at TP-19 (PE). The bin then transfers the coal into a railcar at transfer point TP-20 (TC). When the proposed equipment within this application is constructed, BC-5 will be removed and replaced with BC-9. The existing railcar loudout (bin B6) will be pulled from service.

The proposed modification and additions within this application (R13-2252A) will consist of expanding the open stockpile OS-1 from its existing permitted dimensions to 120,000 ft<sup>2</sup>. Trucks will continue to dump coal into the pile at TP-1 (N) and also proposed bins B1(PE), B2 (PE) and B3 (PE) at TP-2 (PE). One bin at a time will be utilized and each will dump onto proposed belt conveyor BC-7 (PE) at TP-3 (PE). Coal will then be transferred to proposed belt conveyor BC-8 (PE) at TP-4 (PE). Coal will then be transferred from BC-8 to proposed belt conveyor BC-1 (PE) at TP-7 (PE). Proposed belt conveyor BC-9 (PE) will also transfer coal from the existing bins B4 (PE) and B5 (PE) to BC-1, however, not concurrently with BC-8.

From BC-1, coal will transfer into the screen/crusher building at TP-8 (PE) into the screen S1 (FE). Coal that passes through the screen will be transferred onto the proposed belt conveyor BC-2 (PE) at TP-10 (FE). Coal that does not pass through the screen will be directed into the proposed crusher CR1 (FE) at TP-9 (FE). Crushed coal will then be transferred onto BC-2 at TP-11 (FE).

BC-2 will then transfer coal onto proposed belt conveyor BC-3 (PE) at TP-12 (PE). Coal will then be transferred onto belt conveyor BC-4 (PE) at TP-13 (PE). Coal will then be transferred from BC-4 into proposed bins B7 (PE), B8 (PE), B9 (PE) and B10 (PE) at TP-14 (PE). Coal from BC-4 can be directed into only one bin at a time. From bin B7, coal will be transferred to proposed belt conveyor BC-15 at TP-21 (FE). From B8 to BC-16 at TP-22 (PE). From B9 to BC-17 at TP-23 (FE). From B10 to BC-18 at TP-24 (FE). From BC-15, BC-16, BC-17 and BC-18, coal will be transferred to proposed belt conveyors BC-6 at TP-25 (FE), TP-26 (FE), TP-27 (FE) and TP-28 (FE). From BC-6, coal is then transferred into proposed bin B11 at TP-29 (FE). B11 will then dump onto a railcar at TP-30 (TC).

There are no VOC's or HAP's associated with the Eckman Loadout.

The facility shall be constructed and operated in accordance with the following equipment and control device information:

Equipment ID No.	A M R <sup>1</sup>	Year	Description	Maximum Rated Throughputs		Control Equip-ment <sup>2</sup>	Associated Transfer Points		
				TPH	TPY x 10 <sup>-3</sup>		Location: B -Before A -After	ID. No.	Control Equip-ment <sup>2</sup>
Off-Load Circuit									
OS-01	M	2010	120,000 ft <sup>2</sup> - Open Coal Storage and Loadout Stockpile receives coal from trucks and loadsout to endloader	----	2,500	SW-WS	B A A	TP-1 TP-2 TP-15	TD-MDH MDH PE
B1	A	2010	30 Ton Feed Bin for Coal - receives coal from front-end loader and transfers to BC-7	----	83.333	PE	B A	TP-2 TP-3	MDH UC-PE
B2	A	2010	30 Ton Feed Bin for Coal - receives coal from front-end loader and transfers to BC-7	----	83.333	PE	B A	TP-2 TP-3	MDH UC-PE

R13-2252A  
Mid-Vol Coal Sales, Inc.  
Eckman Loadout

Equipment ID No.	A M R	Year	Description	Maximum Rated Throughputs		Control Equip-ment <sup>2</sup>	Associated Transfer Points		
				TPH	TPY x 10 <sup>3</sup>		Location: B -Before A -After	ID. No.	Control Equip-ment <sup>2</sup>
B3	A	2010	30 Ton Feed Bin for Coal - receives coal from front-end loader and transfers to BC-7	----	83.333	PE	B A	TP-2 TP-3	MDH UC-PE
BC-7	A	2010	Belt Conveyor for transfer of coal - transfers coal (+6"X0) from B1 or B2 or B3 to BC-8	1,500	2,500	PE	B A	TP-3 TP-4	UC-PE PE
BC-8	A	2010	Belt Conveyor for transfer of coal - transfers coal (+6"X0) from BC-7 to BC-1	1,500	2,500	PE	B A	TP-4 TP-7	PE PE
B4	M	2010	100 Ton Feed Bin for Coal - receives coal from front-end loader and transfers to BC-9	----	1,250	PE	B A	TP-15 TP-17	MDH UC-PE
B5	M	2010	100 Ton Feed Bin for Coal - receives coal from front-end loader and transfers to BC-9	----	1,250	PE	B A	TP-15 TP-17	MDH UC-PE
BC-5	R	1999	Belt Conveyor for transfer of coal - receives coal (+6"X0) from B4 or B5 and transfers into B6 (TO BE REMOVED)	3,500	2,500	PE	B A	TP-18 TP-19	PE PE
B6	R	1999	50 Ton - Feed Bin for Coal - receives coal from BC-5 and transfers to railcar via telescopic chute (TO BE REMOVED)	----	2,500	PE	B A	TP-19 TP-20	PE LR-TC
BC-9	A	2010	Belt Conveyor for transfer of coal - receives coal (+6"X0) from B4 or B5 and transfers onto BC-1	1,500	2,500	PE	B A	TP-17 TP-7	UC-PE PE
<b>Coal Processing Circuit</b>									
BC-1	A	2010	Belt Conveyor for transfer of coal - receives coal (+6"X0) from BC-8 or BC-9 then transfers into screen S1	1,500	2,500	PE	B B A	TP-7 TP-7 TP-8	PE PE FE
S1	A	2010	Triple Deck Screen - receives coal (+6"X0) from BC-1. Coal (+2"X0) transfers onto belt conveyor BC-2 and coal (+6"X0) transfers into crusher CR1	1,500	2,500	FE	B A A	TP-8 TP-10 TP-9	FE FE FE
CR1	A	2010	Double Roll Crusher - receives coal from S1, crushes and discharges onto BC-2	1,500	2,500	FE	B A	TP-9 TP-11	FE FE
BC-2	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) from S1 and CR-1 then transfers onto belt conveyor BC-3	1,500	2,500	PE	B B A	TP-10 TP-11 TP-12	PE PE PE
<b>Loadout Circuit</b>									
BC-3	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) from BC-2 then transfers onto belt conveyor BC-4	1,500	2,500	PE	B A	TP-12 TP-13	PE PE
BC-4	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) from BC-3 then transfers into B7 or B8 or B9 or B10	3,500	2,500	PE	B A	TP-13 TP-14	PE PE
B7	A	2010	5,000 Ton Loadout Bin for Coal - receives coal from BC-4, stores and transfers underbin to BC-15	----	625	PE	B A	TP-14 TP-21	PE FE
B8	A	2010	5,000 Ton Loadout Bin for Coal - receives coal from BC-4, stores and transfers underbin to BC-16	----	625	PE	B A	TP-14 TP-22	PE FE
B9	A	2010	5,000 Ton Loadout Bin for Coal - receives coal from BC-4, stores and transfers underbin to BC-17	----	625	PE	B A	TP-14 TP-23	PE FE
B10	A	2010	5,000 Ton Loadout Bin for Coal - receives coal from BC-4, stores and transfers underbin to BC-18	----	625	PE	B A	TP-14 TP-24	PE FE
BC-15	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) underbin from B7 then transfers onto belt conveyor BC-6	3,500	2,500	PE	B A	TP-21 TP-25	FE PE
BC-16	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) underbin from B8 then transfers onto belt conveyor BC-6	3,500	2,500	PE	B A	TP-22 TP-26	FE PE

Equipment ID No.	A M R	Year	Description	Maximum Rated Throughputs		Control Equipment <sup>2</sup>	Associated Transfer Points		
				TPH	TPY x 10 <sup>3</sup>		Location: B -Before A -After	ID. No.	Control Equip-ment <sup>2</sup>
BC-17	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) underbin from B9 then transfers onto belt conveyor BC-6	3,500	2,500	PE	B A	TP-23 TP-27	FE PE
BC-18	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) underbin from B10 then transfers onto belt conveyor BC-6	3,500	2,500	PE	B A	TP-24 TP-28	FE PE
BC-6	A	2010	Belt Conveyor for transfer of coal - receives coal (+2"X0) from BC-15, BC-16, BC-17 and BC-18 then transfers into bin B11	1,500	2,500	PE	B B B A	TP-25 TP-26 TP-27 TP-28 TP-29	PE PE PE PE FE
B11	A	2010	200 Ton Loadout Bin for Coal - receives coal from BC-6, stores and transfers to railcar via two (2) Telescoping Chutes	----	2,500	FE	B A	TP-29 TP-30	FE LR-TC

<sup>1</sup> A - Addition; M - Modification; R - Removal (Existing unmodified equipment to be included in the permit is labeled with an M.)

<sup>2</sup> FE - Full Enclosure; PE - Partial Enclosure; TD - Truck Dump; N - None; LR-TC - Railcar Loadout w/ Telescoping Chutes;

UC - Underbin Conveyor; MDH - Minimum Drop Height

<sup>3</sup> Value X 1,000

### INSTALLATION AND STARTUP SCHEDULE (taken from application)

Construction has begun on foundations and other parts of the facility. Operational start-up date (as well as construction completion) is estimated for January 1, 2010.

### DESCRIPTION OF FUGITIVE EMISSIONS

Potential sources of fugitive particulate emissions for this facility include emissions that are not captured by pollution control equipment, emissions from open stockpiles and vehicular traffic on paved and unpaved haulroads and work areas. The haulroads, stockpiles and work areas will be controlled by water sprays and by water truck. The water truck will be operated on a regular basis, depending on weather conditions and the operating schedule for the facility.

All belt conveyors are partially enclosed and equipment transfer points are partially or fully enclosed. Water sprays are located at various transfer points throughout the facility to be used on an as needed basis.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present, but in keeping with MSHA Safety Standards.

### SITE INSPECTION

Andy Grimm of the Division of Air Quality Enforcement Section and the writer performed a site visit on March 17, 2010. Original equipment is still in place and the majority of the construction is complete with the exception of B1, B2, B3, OS-1 and the feed conveyor into the

R13-2252A  
Mid-Vol Coal Sales, Inc.  
Eckman Loadout

crusher building. This is an after-the-fact application for modification. The changes are stated to have occurred on October 12, 2009 in section 14A of application.

Directions to the Mid-Vol Coal Sales, Inc., Eckman Loadout are as follows: From US Route 52 at Eckman WV, go south on route 52/9 approximately 1 mile to facility on left.

#### ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Fugitive emission calculations for continuous and batch drop operations, transfer points, storage piles and unpaved haulroads are based on AP-42 "Compilation of Air Pollution Emission Factors." Control efficiencies were applied based on "Calculation of Particulate Matter Emission - Coal Preparation Plants and Material Handling Operations." The estimated emission calculations were performed by the applicant's consultant and were checked for accuracy and completeness by the writer.

The proposed modification will result in an estimated potential to discharge controlled emissions of 371.97 pounds per hour and 272.49 TPY of particulate matter, of which 100.42 pounds per hour and 66.85 TPY are less than ten (10) microns in diameter. Mid-Vol Coal Sales, Inc. proposed modification will result in the following estimated potential to discharge controlled emissions:

Emissions Summary - <i>Mid-Vol Coal Sales, Inc.</i> <i>R13-2252A</i>	Controlled PM Emissions		Controlled PM <sub>10</sub> Emissions	
	lb/hour	TPY	lb/hour	TPY
<b>Fugitive Emissions</b>				
Stockpile Emissions	0.01	0.03	0.00	0.02
Unpaved Haulroad Emissions	129.79	54.08	38.31	15.96
Paved Haulroad Emissions	188.29	188.29	36.73	36.73
<b>Fugitive Emissions Total</b>	<i>318.09</i>	<i>242.40</i>	<i>75.04</i>	<i>52.70</i>
<b>Point Source Emissions</b>				
Equipment Emissions	36.00	27.50	16.92	12.93
Transfer Point Emissions	17.88	2.58	8.46	1.22
<b>Point Source Emissions Total (PTE)</b>	<i>53.88</i>	<i>30.08</i>	<i>25.38</i>	<i>14.15</i>
<b>FACILITY EMISSIONS TOTAL</b>	<b>371.97</b>	<b>272.48</b>	<b>100.42</b>	<b>66.85</b>

R13-2252A  
Mid-Vol Coal Sales, Inc.  
Eckman Loadout

## REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the proposed facility. The proposed modification of a coal processing plant will be subject to the following state and federal rules:

*45CSR5 To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations*

The facility is subject to the requirements of 45CSR5 because it meets the definition of “Wet wash coal preparation plant” found in subsection 45CSR5.2.4. The facility should be in compliance with Section 3 (less than 20% opacity) and Section 6 (fugitive dust control system and dust control of the premises and access roads) when the particulate matter control methods and devices proposed within application R13-2252A and any amendments thereto are in operation.

*45CSR13 Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation*

The proposed modification is subject to the requirements of 45CSR13 because it will result in an increase in potential to discharge controlled emissions greater than six (6) pounds per hour and ten (10) tons per year, and 144 pounds per day of a regulated air pollutant (PM and PM<sub>10</sub>). The applicant submitted the proper \$1000 application fee and \$1,000 NSPS fee and published a Class I legal advertisement in the *The Industrial News* on February 03, 2010.

*45CSR16 Standards of Performance for New Stationary Sources*

*40 CFR 60 Subpart Y: Standards of Performance for Coal Preparation and Processing Plants*

The proposed modification is subject to 40 CFR 60 Subpart Y because it was constructed after October 24, 1974 and will process more than 200 tons of coal per day. Therefore, the proposed modification is subject to 45CSR16, which incorporates by reference 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants. The facility should be in compliance with Section 254(a) (less than 20% opacity for coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, re-constructed or modified on or before April 28, 2008) and Section 254(b) (less than 10% opacity for coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, re-constructed or modified after April 28, 2008) when the particulate matter control methods and devices proposed are in operation..

*45CSR30 Requirements for Operating Permits*

The facility’s potential to emit will be 14.15 TPY of a regulated air pollutant (PM<sub>10</sub>), not including fugitive emissions, which is less than the 45CSR30 threshold of 100 TPY for a major source. However, the facility is subject to 40 CFR 60 Subpart Y. Therefore, the facility is still subject to 45CSR30 and remains classified as a Title V deferred non-major source.

R13-2252A  
Mid-Vol Coal Sales, Inc.  
Eckman Loadout

The proposed modification will not be subject to the following state and federal rules:

*45CSR14 Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration*

In accordance with 45CSR14 Major Source Determination, the proposed coal handling and truck loadout facility is not listed in Table 1. The facility will have the potential to emit 30.08 TPY of a regulated air pollutant (PM), not including fugitive emissions, which is less than the 45CSR14 threshold of 250 TPY. In accordance with subsection 2.4.3.d, this facility is not listed in Table 1, and so fugitive emissions are not included when determining source applicability. Therefore, the proposed modifications are not subject to the requirements set forth within 45CSR14.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the pollutants being emitted from this facility are PM (particulate matter) and PM<sub>10</sub> (particulate matter less than 10 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the size and proposed location of this facility. This facility will be located in McDowell County, WV, which is currently in attainment for PM (particulate matter) and PM<sub>10</sub> (particulate matter less than 10 microns in diameter).

MONITORING OF OPERATIONS

For the purposes of determining compliance with maximum throughput limits, the applicant shall maintain certified daily and monthly records. An example form is included as Appendix A to Permit R13-2252A. An example form for tracking the amount of water applied through the water truck is included as Appendix B to Permit R13-2252A. An example form for the Monthly Opacity Testing is included as Appendix C to Permit R13-2252A. The Certification Of Data Accuracy statement shall be completed within fifteen (15) days of the end of the reporting period. These records shall be maintained on site by the permittee for at least five (5) years and shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.

## RECOMMENDATION TO DIRECTOR

The information contained in this modification permit application indicates that compliance with all applicable regulations should be achieved when all of the proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. No public comments were received. Therefore, the granting of a permit to Mid-Vol Coal Sales, Inc. for the modification of their facility located in Eckman, McDowell County, WV is hereby recommended.

---

Thornton E. Martin Jr.,  
Permit Engineer

---

April 08, 2010  
Date